

Iowa Power Fund Board – Due Diligence Committee (DDC)
Meeting Minutes
March 26, 2008

Iowa Insurance Commission
Lobby Conference Room
330 E. 12th Street
Des Moines, Iowa

Call to Order:

Roya Stanley, Chair, called the meeting to order at 11:35 A.M.

Roll Call:

Member	Present	Absent
John Brighton	X	
Franklin Codel	conf.call	
Ted Crosbie		X
Vern Gebhart		X
Patricia Higby	X	
Fred Hubbell	conf.call	
William [Curt] Hunter	conf.call	
Roya Stanley	X	

Also in attendance from the OEI, Governor's Office: Jennifer Wright, Michelle Bauer, Deborah Svec-Carstens (associate general counsel, Governor's Office), Lucy Norton (Voting Member, Iowa Renewable Fuels Association) and Brian Crowe (Recording Secretary).

Approval of Agenda:

Roya suggests approving the agenda, Ms. Higby moved, with Mr. Brighton seconds that the agenda for this meeting is approved passed on voice vote.

Approval of Minutes:

Ms. Higby indicated that there were several minor corrections that staff should incorporate into the minutes. Mr. Brighton moved to approve the meeting Minutes for March 11, 2008 with Ms. Higby's changes, Mr. Hubbell seconds; passed on a voice vote.

Chair's Remarks:

None.

Pre-Application Review

1080: Energy Efficiency Program in Muscatine- this project is from Muscatine School District that promotes energy efficiency measures. The bulk of the funding request is for FOSS kits. FOSS equipment kits engage students in hands-on science concepts through their own explorations using field-tested materials, student readings and technology. The multidisciplinary lesson plans will be directed in the areas of energy efficiency, renewable energy, alternative fuels, recycling, waste management and energy conservation.

There are several other kits that could also be used, although the FOSS kit is good. There is uncertainty about the curriculum. There are some activities listed in the proposal that the district is already involved in.

Yes- none

Yes, if- none

No but- Brighton, Higby, Hubbell, Hunter

No- Codel

1081: Vernon Research Group- this proposal seeks to determine the most effective way, through focus groups and telephone interviews, to market energy efficiency ideas to the general public and to students. This may intersect with work that is being undertaken by the Office of Energy Independence for the Energy Independence Plan. The information could be useful going forward.

Telephone surveys could be doubtful as representative as many people have cell phones instead and not all Iowans may have phones.

Yes- none

Yes, if- none

No but- none

No- Brighton, Codel, Higby, Hubbell, Hunter

1082: Climate Change Education – Iowa State University Extension Service will have conversation in communities about climate change. The goals are to gain perspective on the attitudes Iowans have about climate change and to present to the participants a large menu of possible individual and community based actions to mitigate climate change, and to get an idea from the participants which actions they are most willing to undertake. The information from these community conversations would be used to put together a public education campaign. Another round of public meetings would then be hosted by ISU Extension to ensure that the work of the education campaign is qualified, rewarded and disseminated to the wider public.

Tabled. Loss of quorum. Ms. Higby and Mr. Brighton recused themselves.

No action taken.

1083: Muscatine Safe Streets- This is a proposal for a community-wide process for aggressively reducing current energy consumption while building the skills and knowledge needed to achieve energy independence by 2020. Specifically, the community would like to partner with the public utility to conduct energy audits in targeted neighborhoods. The funding would go towards projects identified in the energy audit process.

This project is in conjunction with the other Muscatine projects. There is not clearly identified match.

It is great that a city wants to do this community wide activity, but there needs to be more match from the organization. It is a lot of money for the Power Fund to invest in one community.

There should be an effort for the city to get some assistance, but not at the level that is requested.

There should have been more detail in the proposal. There should have been other funding sources engaged to provide match.

Yes-none

Yes, if- none

No but-Brighton, Higby, Hubbell, Hunter

No- Codel

1084: Fairfield Model - this proposal focuses on Phase I of the process of making Fairfield sustainable by conducting a community wide strategic “green” plan. The funding would be put towards collecting baseline data, conducting a community-wide strategic plan for sustainability, exploring community supported renewable energy solutions, and continuing to develop the Sustainable Learning and Visitors Center.

This proposal is pretty broad.

The plan seems to guide broader actions that could be applicable across the state.

There is question about the funding of the community center; generally the Fund does not support bricks and mortar.

A narrower approach could be more comfortably supported.

Yes-none

Yes, if- Brighton, Codel, Higby, Hubbell, Hunter

No but-none

No- none

1085: Sensible Energy Roadshow – this proposal seeks to bring a display about energy and energy efficiency to fairs around the state.

The company is well know and currently has the largest solar array in the state.

It is a small amount of money, and it would seem to have a big impact.

Yes- Higby

Yes, if- Brighton, Hubbell, Hunter

No but-none

No- Codel

1086: Quad Counties Commercialization Center- this proposal seeks to bring together groups to deal with improving the ethanol process and other energy conservation issues. This is a center that would span the scope of idea to innovation. This would be a gathering place of ideas that can be developed very rapidly from thought, to lab, to commercialization.

There is a question if this proposal is seeking funding for bricks and mortar for this office lab and meeting space.

There is a question about who would benefit from the ideas developed at the center.

Should there be a cooperative effort by the ethanol producers to develop a similar idea, not just one co-op.

Yes- none

Yes, if- none

No but- none

No- Brighton, Codel, Higby, Hubbell, Hunter

1087: Sustainable City Solutions- this proposal seeks to develop an integrated website and software application for communities to monitor their implementation of energy efficiency programs.

The Power Fund would be used to fund data collection and web design. It is unclear if this is a for-profit or non-profit organization.

There is a small amount of match.

Iowa Association of Municipal Utilities had a similar program some years ago to measure community energy efficiency efforts.

Another pre-proposal could be beneficial.

Yes- none

Yes, if- none

No but-Brighton, Higby

No- Codel, Hubbell, Hunter

1088: Muscatine Power and Water – this is a proposal in conjunction with the other applications in the Muscatine project. MP&W plans to perform Residential Energy Audits in the community and reduce the aggregate energy consumption of 400 Muscatine households/year by 1% per year 2013-2023. Depending on the success of the pilot, the program could be extended throughout the community.

The goal of this project seems to be slightly modest in comparison to current energy savings by other energy providers. There is a significant amount of money being requested. A more streamlined proposal from Muscatine would be considered.

There is currently a program in the state that engages schools to help achieve energy efficiency. Pending legislation this program might be a good opportunity for school districts across the state to engage in energy efficiency models.

Yes-none

Yes, if- none

No but- Higby

No- Brighton, Codel, Hubbell, Hunter

1089: Krell Institute – this proposal seeks to engage school districts across the state to achieve energy efficiency. The Krell Institute would introduce the Schools for Energy Efficiency (SEE) Program to Iowa schools. The goal is to enroll 10 school districts in year one and 10 school districts each year thereafter. For enrolled school districts the goal is to reduce their annual energy usage by 10%.

The savings goal seems to be at the lower end for energy efficiency.

This may intersect with other programs in Iowa.

SEE is a very successful model. Once the program is started it should be self-sustaining. The program has worked in Minnesota, and it should work in Iowa.

It may be better to have an Iowa company do the work, and not a Minnesota firm.

Yes- none

Yes, if- Higby, Hubbell

No but- Brighton, Codel, Hunter

No- none

1090: Muscatine School District- this proposal would evaluate the School District's current HVAC systems and determine the most feasible method of retrofitting geothermal and energy recovery technologies.

There is question if the SILO funds are available for match.

There are also the questions about the funding as a grant with a quick payback.

Yes-none

Yes, if- none

No but- none

No- Brighton, Codel, Higby, Hubbell, Hunter

1091: Cornstalk Based Fast Pyrolysis- this project seeks to build and operate a full scale biorefinery using cornstalks as the primary biomass feedstock to produce bio oil and agricultural biochar.

This is a technology that has had some national investment.

There would probably need to be a technical and financial review.

There seems to be good match from USDA.

There needs to be some sites to referenced material in the pre-apps.

Power Fund dollars seem to be used for the administration of the business, not actual research.

Will the technology developed in this proposal be shared?

Yes-none

Yes, if - none

No but - Codel, Hubbell

No- Brighton, Higby, Hunter

1092: Biomass Boiler Fueled with Engineered Pellets- this project seeks funding for the installation of a bio-mass boiler and equipment that would use engineered biomass pellets.

The proposal is similar to other proposals that were rejected by the committee.

Yes- none

Yes, if- Brighton, Higby

No but - Codel, Hunter

No- Hubbell

1093: Vermeer: Corn Cob Harvester- this project seeks to develop a corn cob harvester by the Vermeer Corporation. The equipment allows for farmers to collect corn cobs after grains have been stripped.

The project seems to be well developed. Power Fund money would most likely improve the process.

The project would most likely go to market without Power Fund support based on current market demand.

The project would generate 9 jobs.

A loan might be more feasible.

The need for funding was not clearly expressed in the proposal.

Yes-none

Yes, if- none

No but- Brighton, Higby

No-Codel, Hubbell, Hunter

1094: Iowa Algae Bioreactor Implementation- this proposal seeks to bring an algae based bioreactor to the Maharishi University in Fairfield. There will be an education center included, and they will add a sustainability model from funding.

The proposal is in-depth and seems like it would be an interesting idea for Iowa.

It is unclear what the Power Fund money would be doing, i.e. would all phases be included in the funding, and what will be accomplished in the three years, and is more match possible.

The money seems to be to purchase the system which is well established.

Construction of the lab seems to be bricks and mortar which is not covered by the Power Fund.

The scalability of the technology should be addressed in future proposals.

Additional funding for salaries is encouraged.

Yes-none

Yes, if- Brighton, Codel, Higby, Hubbell

No, but- Hunter

No- none

1096: Resolution to Biofuel Stability- This proposal seeks to develop optimal antioxidant systems to maximize the storage life and performance of biodiesel and to eliminate potential damage to vehicle fuel systems. These systems would be immediately usable by biodiesel producers.

This is a well coordinated proposal that seems to have implications that are immediately viable for the biodiesel industry.

Some IP issues will need to be addressed.

The problem seems to be resolvable with a degree of certainty, it seems like the biodiesel industry would greatly benefit from this study, and there should be biodiesel industry partners engaged with cost share.

There is uncertainty if the industry has been engaged in the proposal.

Yes- none

Yes, if- none

No but- Hubbell

No-Codel, Higby, Hunter

1097: Prairie Land Enterprises- This proposal seeks to commercially develop switchgrass in Iowa. The proposal seeks Power Fund dollars to purchase equipment to pelletize switchgrass for Iowa.

There are questions if the market exists, or would need to be developed.

Is this project replicable across Southern Iowa, from a Power Fund stand point if the technology was replicable it could be a good investment for Iowa.

It seems that a loan rather than a grant would be more viable.

Yes- none

Yes, if- Brighton, Codel, Higby, Hubbell

No but - Hunter

No- none

1099: ASR Recycling Recovery- this proposal would use microwave frequencies to extract energy from landfill materials.

This proposal seems to fund a feasibility study. It seems that the Power Fund at this point is looking to fund the implementation of technologies not the feasibility studies.

There is no information about energy balance.

Yes- none

Yes, if- Higby, Hubbell

No but- Brighton, Codel, Hunter

No-none

1100: Quaker Oats Cedar Rapids Biomass Project- this proposal is requesting funding to install a biomass boiler that produces steam from oat hulls, a waste stream from their process. This is a biomass energy conversion process.

This is an existing technology.

This is a large corporation seeking funding from the Power Fund, even though they should have the capital to make the investment in their internal processes.

Yes- none

Yes, if- none

No but-none

No- Brighton, Codel, Higby, Hubbell, Hunter

1101: Prime GEO Energy- this proposal seeks to establish deep well geothermal power generation equipment to be installed throughout Iowa.

It is unclear if the technology is fully developed.

This is a very clean energy proposal.

The principals do not seem to have vast energy experience, but do have expertise in the housing market.

There are some questions about the financials, if the numbers are solid or forecasted possibilities.

There is insufficient information about how the technology and financials would work in Iowa.

Yes- none

Yes, if- none

No but- Codel, Higby, Hubbell

No- Brighton, Hunter

1104: PES: Biomass Boiler- this project seeks to develop a biomass dryer for wood. The drying system would allow PES to use wet wood waste from local sawmills. The wood waste is turned into biomass pellets.

This is an early stage commercialization project.

There is not sufficient information about whether or not a consistent market for this technology.

The payback seems to indicate that there should be ample funding available outside of the Power Fund.

There seems to be significant energy use to dry the biomass.

There should be an evaluation of the business plan.

Yes- none

Yes, if- Higby

No but- Brighton, Hubbell, Hunter

No- Codel

1105: Homeland Energy Solutions Gasification Center- this project seeks to develop a coal gasification model in conjunction with an ethanol plant to prove that coal gasification can provide low cost energy to a mid sized manufacturing facility.

There has been a feasibility study. This suggests that there is significant opportunity to develop this technology.

There is a question about the cost share that is being shown as match.

There is a question about financial institutions that are lending the finances for this project.

There are questions about if this technology can be done in an environmentally and economically sustainable way.

Yes-none

Yes, if- none

No but- Higby, Hubbell

No- Brighton, Codel, Hunter

1106: BEST Energies INC. - this proposal seeks to add value to Iowa corn production by increasing the amount of biofuel produced from the same quantity of feedstock through utilization of 100% non-food grade by-product crude corn oil from local ethanol plants.

The plant is up and operational and is seeking to add a value-added process.

This technology would increase value by 33% and has a two year payback. It does not seem that there would be an issue with investing in a technology that has such a rapid payback.

There may not be as many funding sources available to the biofuels industry as there were several years ago.

It is unclear if the ROI includes a Power Fund investment or not.

Yes- none
Yes, if- none
No but- Higby, Hubbell
No- Brighton, Codel, Hunter

1107: Muscatine HNI Project- this proposal would seek to install a geo-exchange ultra efficient control system for the HNI Corporation. The plant would offer educational and model approaches for other businesses.

It seems that this is a four to five year payback without Power Fund investment, but there may be some risk in implementing this technology.

This is a lot of money to be invested in one corporation.

It is unclear if this is new and innovative, or an existing technology.

There is very little match for potentially very successful business model.

Yes- none
Yes, if- none
No but-Higby
No-Brighton, Codel, Hubbell, Hunter

1108: Innovative Drying Hub- this proposal would develop innovative drying center for utilization of co-products. The prototype would be available for industry collaboration and research for development in the drying industry.

Trial sales are not necessarily matching dollars. The match seems to be closer to 1:1 not 2:1.

A grant may not be feasible, more of a loan.

Yes- none
Yes, if- none
No but- Brighton, Higby, Hubbell, Hunter
No-Codel

1109: Utilizing Glycerol in Swine and Poultry Markets- this proposal seeks to research handling and feeding glycerol to swine and poultry to help the economics of the biofuels industry.

A technical review may be necessary.

Was a well written proposal and should be considered.

The financials and out of state universities involvement need to be clearer.

Yes-none
Yes, if- Codel, Hubbell, Hunter
No but- Higby
No- none
Recusal- Brighton

1095: Heartland Renewable Energy Sugar Crop Feedstock- this proposal seeks to establish sugar beets as a feedstock for ethanol development. The company would like to do some test plots with a new method for developing test plots. HRE would also educate farmers that sugar beets are a cash crop and make available harvesting equipment to lease to farmers.

There are questions about whether or not farmers would plant sugar beets with current prices.

USDA could or should be involved in this project.

If the company can raise \$16.6 million dollars and has positive food to fuel impacts this could be a viable project for the Power Fund.

The company would be open to a loan.

Yes-none

Yes, if- Brighton, Hubbell

No but- Codel, Higby, Hunter

No- none

1098: Creation of Novel Hydrogen Fuel Cell Modules - this proposal seeks to develop energy storage materials for hydrogen storage pathway. Power Fund dollars would be used to leverage further dollars.

There is no funding requested for equipment, because the equipment is already in place to do research.

It is unclear about how the State of Iowa and the state's energy needs would benefit from the proposal. It was explained that the technology advance would be in energy storage.

A technical review would be necessary, it is also necessary to see how Iowa could play a major role in the development of hydrogen.

This seems to be basic research.

There does not seem to be industry support for this project other than government agencies.

Yes-Higby

Yes, if- Brighton, Codel, Hubbell, Hunter

No but- none

No- none

1102: Hybrid Power Center- this proposal seeks to use a combination of coal and nuclear power to improve energy efficiency and reduce CO2 emissions for power generation.

Technical review would be necessary.

There seems to be a host of royalty possibilities for the State of Iowa.

This seems to be at the very beginning stages. It seems to be very high risk and long term. It could be feasible to support them for a year, and see what progress is made at that point.

Yes-none

Yes, if- none

No but- Brighton, Codel, Hubbell, Hunter

No- Higby

1103: Amana Renewable Energy Project- this proposal seeks to build an anaerobic digester and education center in the Amana Colonies. The methane captured would be burned on site to produce electricity and the electricity would be sold to the local service provider.

There is a question on what digester technology is being implemented at this site.

Does Amana need a grant or could a grant from the educational aspect and a loan for the digester work for this project?

Is this a for profit agency? Why is so much government money necessary to develop this program?

Is there a power supply contract in place?

Yes-none

Yes, if- Brighton, Higby

No but- Codel, Hubbell, Hunter

No- Higby

Other Business

- Ms. Higby believes that the pre-application is too short, and the financials should be cleaned up. Some other questions might need to be more clearly defined for the pre-application.
- Policies for the fund need to be established for the applicants to give further instruction, i.e. bricks and mortar, match, maximums, etc.

Adjournment:

There being no further business to discuss at this time, the meeting adjourned at about 3:40 P.M. It was indicated the next meeting would be Monday, March 31st at IUB.

Roya Stanley, Committee Chair

Brian Crowe, Recording Secretary

Date